

**立法會**  
**Legislative Council**

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**Panel on Information Technology and Broadcasting**

**Meeting on 8 July 2013**

**Updated background brief on facilitating a digital economy  
under the Digital 21 Strategy**

**Purpose**

This paper provides an update on facilitating a digital economy under the Digital 21 Strategy and summarizes the latest views and concerns expressed by Members on the subject.

**Background**

2. The latest version of the Digital 21 Strategy was published in December 2007 and is a blueprint for the development of information and communication technology ("ICT")<sup>1</sup> in Hong Kong. The focus of the Digital 21 Strategy is to advance Hong Kong's achievements, seize new opportunities and harness its advantage so as to strengthen its position as a leading digital city. The ultimate aim is to promote Hong Kong's economic development and to provide better services to citizens. The Statements of Desired Outcomes of the Five Action Areas under the Strategy are: facilitating a digital economy, promoting advanced technology and innovation, developing Hong Kong as a hub for technological cooperation and trade, enabling the next generation of public services, and building an inclusive, knowledge-based society.

3. According to the Administration, the desired outcome for the action area of facilitating a digital economy is: *"Hong Kong has the standards,*

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<sup>1</sup> ICT refers to all technologies and applications that involve information processing and/or exchange over communication networks, including the internet.

*infrastructure, legal framework and talent that are needed to facilitate a vibrant digital economy, and to enable our core industries to sustain and improve their competitive position. Our community, individuals and businesses are aware of the opportunities brought by a knowledge-based society and have confidence in their ability, skills and professionalism to take full advantage of the opportunities to enhance our economic prosperity and quality of life."* The Administration has been working closely with the ICT industry to formulate and implement initiatives to drive the development of Hong Kong's digital economy. The major initiatives include:

- (a) development of data centres;
- (b) collaboration with the Mainland on mutual recognition of electronic signature certificates, cloud computing and technology exchanges;
- (c) development of Internet infrastructure, including enhancing information security infrastructure, strengthening Hong Kong Internet Exchange and migrating to Internet Protocol version 6;
- (d) promoting the adoption of ICT among small and medium enterprises ("SMEs");
- (e) ICT manpower development; and
- (f) Green ICT.

## **Previous discussions**

4. The Panel on Information Technology and Broadcasting ("the Panel") generally supported the development of the Digital 21 Strategy and received regular reports from the Administration on its implementation.

### Support for ICT small and medium enterprises

5. At the Panel meeting on 11 July 2011, members urged the Administration to provide assistance to the SMEs of the ICT sector, in particular the Internet content providers, to develop the Mainland market and benefit from the closer economic integration with the Mainland under the Mainland and Hong Kong Closer Economic Partnership Arrangement ("CEPA"). The Administration advised that various segments of telecommunications services had been liberalized under CEPA to allow Hong Kong service suppliers to set up joint venture enterprises with

shareholding not exceeding 50% in the Mainland and to provide various types of value-added telecommunications services. These included Internet data centre services, store and forward services, call centre services, Internet access services, content services and Internet Protocol based virtual private network services.

6. At the Panel meeting on 12 April 2012, the Administration briefed members on the progress of the Cyberport Project. Some Panel members opined that the Cyberport had not yet managed to achieve some of its public missions, such as "to create a strategic cluster of quality IT and IT related companies critical to the development of Hong Kong into a leading digital city in the region". These members opined that apart from fostering IT exchanges with the Mainland, Hong Kong should also step up exchanges with other countries in the Asia Pacific region such as Korea and Taiwan. The Hong Kong Cyberport Management Company Limited advised that in order to help the incubatees survive after graduation from the Incubation Programme, the Cyberport had established the Collaboration Centre which aimed at assisting SMEs in the ICT sector to explore and capture emerging business opportunities in other markets such as the Mainland. The Administration also advised that in pursuit of its public missions, the Cyberport announced in 2011 its plans to invest HK\$100 million in Hong Kong's ICT over a period of three years.

#### ICT manpower development

7. At the Panel meeting on 11 July 2011, members expressed concern about certain weaknesses in Hong Kong's human capital compared to other Chinese cities, namely the lower rate of enrolment in universities of secondary school graduates, and the lower academic qualifications of the working population. The Administration advised that it would foster an environment in which a well-qualified IT workforce could flourish and meet the needs of the society. In this regard, the Cyberport had implemented the IT Internship Co-ordination & Facilitation Programme and the IT Exchange Programme. The Administration had been working with the industry and academia to enhance the portfolio of ICT professional qualifications.

#### Data centre development

8. At the Panel meeting on 11 July 2011, members noted the development of data centres in Qianhai of Shenzhen and Foshan, and urged the Administration to encourage the setting up of such data centres in Hong Kong in the face of keen competition from the neighbouring cities. The Administration advised that in 2010-2011, about eight hectares of land in the Tseung Kwan O Industrial Estate were granted by the Hong Kong Science and Technology Parks Corporation for the development of data centres.

Meanwhile, the Administration would promote the use of industrial buildings for developing data centres with mid-tier requirements. The Administration would continue to implement facilitation measures for the ICT sector, including the identification of suitable land for the setting up of data centres.

9. At the Panel meeting on 10 July 2012, some members urged the Administration to expedite the provision of land for the development of data centres. They also urged the Administration to allow the two electricity companies to supply electricity in designated sites for such development to allow more stable electricity supply. With the increasing external telecommunications volume, the Administration should coordinate with the Mainland authorities to strive for the opening up of the submarine communication cables between Hong Kong and the Mainland to lower prices and consolidate Hong Kong's position as a communications hub. The Administration advised that it would continue to pursue with the Mainland authorities on the opening up of the communications market. On power supply, the Administration advised that the two power companies in Hong Kong had adequate capacity and backup in electricity generation.

### **Recent developments**

10. When discussing the progress update of e-government development at the Panel meeting on 10 June 2013, some Panel members urged the Administration to advise on its plans and strategy for developing Internet of Things ("IOT"). The Administration advised that the Government was conducting a review under its Digital 21 Strategy, and considered that developing IOT for Hong Kong could be its next strategic step forward, including daily life applications of IOT.

11. At the special meeting of the Finance Committee on 10 April 2013, Hon Charles Peter MOK enquired about the manpower, resources required, the specific time-table and the activities for conducting the review on the Digital 21 Strategy. He also enquired about the Administration's plans to increase the supply of land suitable for data centre development. The Administration's replies are in **Appendices I and II**.

### Council meetings

12. At the Council meeting of 6 February 2013, Dr Hon Elizabeth QUAT raised a question on the development of data centres, including green data centres, in Hong Kong. At the Council meeting of 15 May 2013, Hon Charles Peter MOK raised a question on the development of high-tier data centres in Tseung Kwan O Industrial Estate. The Administration's replies

are in **Appendices III** and **IV**.

### **Latest position**

13. The Administration will brief the Panel on 8 July 2013 on the progress made in facilitating a digital economy under the Digital 21 Strategy.

### **Relevant papers**

14. A list of the relevant papers with their hyperlinks is at:

[http://www.legco.gov.hk/yr11-12/english/panels/itb/papers/itb\\_eb.htm](http://www.legco.gov.hk/yr11-12/english/panels/itb/papers/itb_eb.htm)

[http://www.legco.gov.hk/yr15-16/english/panels/itb/papers/itb\\_eb.htm](http://www.legco.gov.hk/yr15-16/english/panels/itb/papers/itb_eb.htm)

Council Business Division 4  
Legislative Council Secretariat  
3 July 2013

Examination of Estimates of Expenditure 2013-14

**CONTROLLING OFFICER'S REPLY TO  
INITIAL WRITTEN QUESTION**

Reply Serial No.

CEDB(CT)098

Question Serial No

2643

Head: 47 – Government Secretariat : Subhead (No. & title):  
Office of the Government Chief  
Information Officer

Programme: (2) IT Infrastructure and Standards

Controlling Officer: Government Chief Information Officer

Director of Bureau: Secretary for Commerce and Economic Development

Question: The Government is reviewing the Digital 21 Strategy and has started consultation with the industry. However, the industry is concerned about whether the Government will introduce performance indicators for the next generation strategy. Please provide information on the following:

- (a) What are the manpower and resources required as well as the specific time-table of conducting the review in 2013-14? When will the Administration complete the review and publish the new strategy?
- (b) Please provide information in a table showing all meeting/activities held in relation to Digital 21 Strategy review as at 28 February 2013 (including the date, venue, purpose of meeting, content of discussion, background of participants and number of participants).
- (c) Please provide information in a table showing the meeting/activities to be held in relation to Digital 21 Strategy review (including the date, venue, purpose of meeting, content of discussion, background of participants to be invited and expected number of participants).
- (d) Does the Administration have any plan to introduce specific objectives and key performance indicators for the new strategy so as to better follow up on the implementation progress? If so, what are the details? If not, why?

Asked by: Hon. MOK, Charles Peter

- Reply:
- (a) We plan to conduct public consultation on the new Digital 21 Strategy in the third quarter of 2013 and to promulgate the finalised Strategy by the end of the year. We have engaged a consultant to conduct the review at a cost of \$1.2 million.
  - (b) We completed on 8 March 2013 the first stage consultation, which covered information technology industry bodies and organisations, academia and relevant government departments. Details are set out at Annex A.
  - (c) We plan to conduct public consultation in the third quarter of 2013 and the arrangements are still under preparation. We will consult various stakeholders, including the Legislative Council and the Digital 21 Strategy Advisory Committee.
  - (d) The Government formulated in 2009 a number of key performance indicators to measure and monitor the progress of desired outcomes under the Digital 21 Strategy.

We are considering concrete initiatives for inclusion in the new document and appropriate means to follow up the progress of their implementation.

Name in block letters: Daniel LAI

Post Title: Government Chief Information Officer

Date: 8.4.2013

	Date	Participants/ Organisations	Venue	Purpose of meeting	Content of discussion	Number of participants
1.	20 February 2013	Industry bodies	Efficiency Unit, Revenue Tower	Explore how to formulate a new blueprint to promote the development of ICT in Hong Kong	<ul style="list-style-type: none"> <li>• Future ICT development trends</li> <li>• How to nurture ICT talents</li> <li>• Facilitating ICT adoption among small and medium enterprises (SMEs), e.g. cloud technology</li> </ul>	10
2.	21 February 2013	Industry bodies	Central Government Offices	- Ditto -	<ul style="list-style-type: none"> <li>• Future ICT development trends</li> <li>• How to nurture ICT talents</li> <li>• Facilitating ICT adoption among SMEs, e.g. cloud technology</li> </ul>	8
3.	22 February 2013	Chief information officers of large organisations and public utilities	Central Government Offices	- Ditto -	<ul style="list-style-type: none"> <li>• How to nurture ICT talents</li> <li>• Providing support to SMEs and ICT startups</li> <li>• Personal e-account and broader e-government services</li> <li>• Opening up more types of public sector information for re-use to create business opportunities, encourage entrepreneurship and promote innovation</li> </ul>	7
4.	27 February 2013	ICT service providers	Office of the Government Chief Information Officer, Wanchai Tower	- Ditto -	<ul style="list-style-type: none"> <li>• How to nurture ICT talents</li> <li>• Providing platforms and support to SMEs and ICT startups</li> <li>• Encouraging research and development (R&amp;D) of innovative technology</li> <li>• Building up ICT industry</li> </ul>	11



	<b>Date</b>	<b>Participants/ Organisations</b>	<b>Venue</b>	<b>Purpose of meeting</b>	<b>Content of discussion</b>	<b>Number of participants</b>
5.	1 March 2013	ICT related quasi-government organisations (e.g. the Hong Kong Cyberport Management Company Ltd., the Hong Kong Science and Technology Parks Corporation, the Hong Kong Productivity Council), recognised certification authorities, the Expert Group on Cloud Computing Services and Standards and its Working Groups	Central Government Offices	- Ditto -	<ul style="list-style-type: none"> <li>• How to nurture ICT talents</li> <li>• Providing platforms and support to SMEs and ICT startups</li> <li>• Encouraging R&amp;D of innovative technology</li> <li>• Building up ICT industry</li> </ul>	19
6.	4 March 2013	Representatives of Information Technology Management Units of various government departments	Central Government Offices	- Ditto -	<ul style="list-style-type: none"> <li>• Personal e-account and broader e-government services</li> </ul>	52
7.	5 March 2013	Digital 21 Strategy Advisory Committee and its Task Forces	Efficiency Unit, Revenue Tower	- Ditto -	<ul style="list-style-type: none"> <li>• Future ICT development trends</li> <li>• How to nurture ICT talents</li> <li>• Providing platforms and support to SMEs and ICT startups</li> <li>• Personal e-account and broader e-government services</li> <li>• Opening up more types of public</li> </ul>	25

	Date	Participants/ Organisations	Venue	Purpose of meeting	Content of discussion	Number of participants
					sector information for re-use to create business opportunities, encourage entrepreneurship and promote innovation <ul style="list-style-type: none"> <li>• Building up ICT Industry</li> </ul>	
8.	5 March 2013	Chief Information Officer Board of Hong Kong Computer Society	HSBC Main Building, Central	- Ditto -	<ul style="list-style-type: none"> <li>• How to nurture ICT talents</li> <li>• Providing platforms and support to SMEs and ICT startups</li> <li>• Encouraging R&amp;D of innovative technology</li> <li>• Building up ICT Industry</li> </ul>	15
9.	6 March 2013	Academia	Central Government Offices	- Ditto -	<ul style="list-style-type: none"> <li>• How to nurture ICT talents</li> <li>• Providing platforms and support to SMEs and ICT startups</li> <li>• Encouraging R&amp;D of innovative technology</li> <li>• Building up ICT Industry</li> </ul>	7

Note 1: The consultant firm also met with relevant government departments to understand that development of ICT in individual policy areas and the way forward.

Examination of Estimates of Expenditure 2013-14

**CONTROLLING OFFICER'S REPLY TO  
INITIAL WRITTEN QUESTION**

Reply Serial No.

**CEDB(CT)099**

Question Serial No

2645

Head: 47 – Government Secretariat : Subhead (No. & title):  
Office of the Government Chief  
Information Officer

Programme: (3) IT in the Community

Controlling Officer: Government Chief Information Officer

Director of Bureau: Secretary for Commerce and Economic Development

Question: Regarding facilitating the development of data centres in Hong Kong, given the unique and stringent technical and site requirements for data centres, would the Administration inform the Committee of the following:

- (a) In 2013-14, does the Administration have any specific plan to increase the supply of land suitable for data centre development? If so, what are the details?
- (b) The Administration plans to allocate a site of 1 hectare next to the Tseung Kwan O Industrial Estate dedicated for the development of data centres. When will the other adjacent site of about 1 hectare be made available?

Asked by: Hon. MOK, Charles Peter

- Reply:
- (a) The Government launched incentive measures in June 2012 to encourage the industry to use industrial buildings and industrial lots for data centre development. As of mid-March 2013, the Government has received 4 applications for converting parts of industrial buildings into data centres, of which 2 have already been approved while the remaining 2 are being processed. The industry can also identify sites for setting up data centres via other channels. To our understanding, in 2012 an operator has successfully identified a site in the private market for setting up data centre. Furthermore, in the industrial estates managed by the Hong Kong Science and Technology Parks Corporation, there are still no less than 4 hectares of land available for bidding by various sectors (including data centre sector). The Government will also provide land for the industry through the Land Sales Programme, including putting up a piece of land for data centre use in Tseung Kwan O for open bidding in mid-2013.
  - (b) With respect to the reserved land in Tseung Kwan O, the Office of the Government Chief Information Officer is liaising with relevant government departments on preliminary planning, including land use modification. We have not yet decided on the timing of making available the reserved land to the market.

Name in block letters: Daniel LAI  
Post Title: Government Chief Information Officer  
Date: 8.4.2013

Examination of Estimates of Expenditure 2013-14

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Name in block letters: Daniel LAI  
Post Title: Government Chief Information Officer  
Date: 8.4.2013

## Press Releases

LCQ14: Green data centres

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Following is a question by Dr Hon Elizabeth Quat and a written reply by the Secretary for Commerce and Economic Development, Mr Gregory So, at the Legislative Council meeting today (February 6):

Question:

In recent years, the Government has been actively attracting investors to set up data centres in Hong Kong. A consultancy study commissioned by the Government pointed out that the demand for data centre space in Hong Kong, measured in terms of Raised Floor Space (RFS), would grow at a compound annual rate of 9.8% from 2009 to 2015. However, some environmentalists have pointed out that the huge electricity consumption by information and communications technology facilities and data centres has an impact on the environment. In this connection, will the Government inform this Council:

(a) of the current number, total area and total RFS of the data centres in Hong Kong, as well as the respective rates of increase of these figures in 2012;

(b) of the total number of data centres set up in Hong Kong as a result of the facilitation efforts made by the Data Centre Facilitation Unit since its establishment in July 2011; of the respective areas, locations and completion dates/expected completion dates of such data centres, as well as the respective companies to which they belong;

(c) whether it has compiled statistics on the annual total electricity consumption of the data centres in Hong Kong; if it has, of the outcome;

(d) given that the average power usage effectiveness (PUE) value of data centres around the world is currently about 1.8 and that of some new data centres can even be as low as 1.1, whether the Government has compiled statistics on the PUE of the data centres in Hong Kong; if it has, of the outcome;

(e) whether it has assessed the impact of the development of data centres on future electricity demands, as well as the impact on tariffs brought about by the investments on power supply facilities made to meet such demands;

(f) given that the Singaporean Government launched the Green Data Centre certification in 2012 and is offering tax concessions ranging from 30% to 50% for investments in energy-saving equipment for data centres, whether the Government has

any plan to formulate, by making reference to such a practice and collaborating with the trade, a set of "Green Data Centre Standards" for the data centres in Hong Kong, and provide financial incentives to encourage data centres to save energy and implement environmental protection measures; and

(g) of the following information relating to the data centres owned by the Government:

(i) current number;

(ii) total area and total RFS;

(iii) total power consumption in 2012;

(iv) average PUE; whether the Government has any plan to set PUE targets for its data centres;

(v) the percentage of data centres implementing the green data centre practices promulgated by the Office of the Government Chief Information Officer in early 2012, as well as the effectiveness of such practices since their implementation; and

(vi) given that the Government has raised the room temperature of its data centres from 22°C to 23°C, and according to the recommendations of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, the standard room temperature of a data centre is 18°C to 27°C and the acceptable temperature can be as high as 32°C, whether the Government will consider gradually raising the room temperature of the data centres to 25°C or 26°C by improving the air distribution in data centres, so as to enhance the PUE of the data centres?

Reply:

President,

My reply to Dr Hon Elizabeth Quat's seven-part question is as follows:

(a) Organisations and enterprises of different sectors may set up data centres having regard to their operational needs. Some of their data centres are set up in their offices or inside commercial or industrial buildings. As the setting up of such data centres does not require government approval, we do not have the number, total area and total raised floor space of all data centres in Hong Kong.

(b) Since its establishment, the Data Centre Facilitation Unit has assisted three overseas operators to set up two high-tier data centres in Hong Kong, with total site area of about three

hectares. Moreover, we also encourage the industry to make use of the incentive measures to convert existing industrial buildings or industrial lots into data centres. As at end December 2012, the Government received a total of four applications for exemption of waiver fees for changing parts of an industrial building into data centre use. Of these, one application has been approved and the remaining three are being processed. Information on their size, locations and completion dates as well as the companies to which they belong is commercial in nature. The Government is not in a position to disclose such information.

(c) and (d) Data centres are not required to report their electricity consumption to the Government. Therefore we do not have the information on the power usage effectiveness (PUE) of data centres. However, we believe that data centres will try their best to use energy efficiently to reduce operating costs.

(e) In searching sites and prior to construction, data centre operators would liaise closely with the power companies on their electricity requirements and the impact on overall power supply. In respect of any proposals to invest in power supply facilities, the Government will continue to perform the gate-keeping duties with best endeavour to safeguard the interests of the public.

(f) In 2012, the Office of the Government Chief Information Officer (OGCIO) promulgated good practices on green data centre management, setting out requirements for green procurement and disposal of information technology equipment and data centre facilities for reference by the industry. Regarding the setting up of new data centres, the Government issued a Practice Note in June 2012 for applications for high-tier data centre development on industrial lots, which requires submission of green building designs and other green measures, with a view to encouraging data centres to achieve energy conservation and enhance energy efficiency. The data centre industry has also implemented various green and energy-saving measures in design and operation to reduce carbon emission and operating costs. For instance, some data centres which have been recently upgraded and new ones will have adopted energy-saving measures in construction and operation, optimisation of air flow and chiller systems, as well as virtualisation of computer servers.

(g) Regarding the information of government data centres:

(i) There are currently 29 government data centres in 18 bureaux and departments (B/Ds).

(ii) The total area and total raised floor space of these data centres are about 19 530 square metres and 12 780 square

metres respectively.

(iii) and (iv) Government data centres are located in the offices of relevant departments or government properties, and their power consumption has been included as an inseparable part of the overall power consumption of those offices or government properties. Hence, we do not have information on the power consumption and PUE of individual government data centre, and have not set any relevant targets.

(v) and (vi) In 2010, OGCIO promulgated the Green Data Centre Practices for reference and adoption by B/Ds in their data centre management. In 2011, OGCIO exchanged views with the Environment Bureau and the Electrical and Mechanical Services Department on these practices (including the latest recommendations of the American Society of Heating, Refrigerating and Air-Conditioning Engineers). Taking into account existing operational considerations of data centres in various B/Ds, it was recommended to raise the room temperature of government data centres to 23°C ( $\pm 3^\circ\text{C}$ ), i.e. 20°C to 26°C. The updated Green Data Centre Practices (version 2012) has reflected this recommendation.

In 2011, OGCIO conducted a survey on green data centre practices among B/Ds, which showed that all B/Ds have undertaken to adopt the recommended practices, and would fully implement these recommendations when renewing systems and facilities as well as setting up new data centres. Moreover, they would enhance existing facilities for better energy efficiency while maintaining normal operational services. For example, in the three data centres managed by OGCIO, we have made reference to the Government's green procurement policy and green product standards promulgated by the Environment Bureau in procuring computer equipment. In addition, we are progressively switching to energy-efficient air conditioning systems, uninterruptible power systems and diesel generators. We have installed green fire protection and lighting systems, raised the room temperature, implemented virtualised infrastructure, and adopted the design to separate hot and cold air when enhancing existing computer systems and installing new systems. We also arrange training, experience sharing sessions and workshops for B/Ds from time to time to promote these practices and increase their awareness on green data centre management.

Ends/Wednesday, February 6, 2013  
Issued at HKT 17:12

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## Press Releases

LCQ21: Tseung Kwan O Cross Bay Link

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Following is a question by the Hon Charles Peter Mok and a written reply by the Acting Secretary for Transport and Housing, Mr Yau Shing-mu, in the Legislative Council today (May 15):

Question:

In recent years, a number of local companies and international enterprises have set up high tier-data centres in Tseung Kwan O Industrial Estate (Industrial Estate), which is also the landing site of submarine optical fibre cables for international telecommunications (telecommunications cables). Availability of alternative routings for data transmission is crucial to the provision of stable and reliable data centre services. Wan Po Road is currently the only feeder road that connects the Industrial Estate with other areas, and yet the underground space of Wan Po Road for accommodating various public utilities is close to its full capacity. Hence, the telecommunications industry has requested that communications equipment be installed on the bridge of the proposed Cross Bay Link at Tseung Kwan O (the Link) to facilitate the development of data centres. However, some members of the telecommunications industry have relayed to me that it was recommended to the Government in the relevant project consultant's report that only public utilities necessary for the daily operation of the road should be allowed to be installed on the bridge of the Link, and telecommunications cables and apparatus would not be included. In this connection, will the Government inform this Council:

(a) whether the authorities have permitted telecommunications service providers to install telecommunications cables and apparatus on various major trunk roads and flyovers in Hong Kong; if they have, of the details and the relevant policies; if not, the reasons for that;

(b) whether the authorities have, when considering the existing or proposed public utilities that might be affected by the Link, taken into account the trend of a continuous increase in the numbers of data centres which commenced/will commence operation, those under construction or extension, and those being planned in the Industrial Estate between 2010 and 2015; if they have, of the details; if not, the reasons for that;

(c) whether the authorities have consulted the operators of data centres in the Industrial Estate on the installation of telecommunications cables and apparatus on the bridge of the Link; if they have, of the details; if not, the reasons for that; and

(d) whether the authorities have accepted the aforesaid recommendation in the project consultant's report; if they have, of the details, and whether they have any alternative for providing the data centres in the Industrial Estate with the external telecommunications cables and apparatus required; if they have not, the reasons for that?

Reply:

President,

The consolidated reply to the four parts of the question is as follows:

Road infrastructure in Hong Kong can be broadly divided into public roads and expressways. The Administration will construct bridges when necessary to connect different locations.

The main purpose of road infrastructure is to provide a safe and efficient transportation network for public use. Addition of other facilities to road infrastructure will only be considered if the operation of road infrastructure is not affected.

Public utility companies, including telecommunications service providers, may apply from the Administration for installation of such public utilities as telecommunications cables on public roads (other than expressways and bridges) according to the established procedures. In principle, these applications will generally be approved if there is a genuine need for the utilities concerned and the relevant company can make appropriate arrangements in terms of design, installation and operation (including preliminary construction and subsequent maintenance) of the utilities to minimise the impact on road users and the public.

As to expressways, due to the heavier traffic flow, apart from public utilities required by road lighting as well as the traffic control and surveillance system, public utilities not related to road operation are usually not allowed in expressway areas for the sake of traffic management and road safety. If such utilities concerned conform to public interest, and their installation and subsequent inspections/repairs/replacement do not involve excavations on carriageways and hard shoulders, the Administration may consider allowing these utilities to be placed along the verges of expressways.

Regarding bridges, especially large-scale bridges such as the Cross Bay Link (CBL), they are already accommodating a certain amount of infrastructural facilities such as road lamps, drains/pipelines, fire service installations as well as traffic control and surveillance systems to ensure traffic safety on and smooth operation of the bridges. Installation of such additional

facilities as cables and conduits other than those necessary for daily operation may not only affect the design of the bridges, but also impose extra loads on the bridges' building structure. Subject to their nature and structure, the additional facilities may also affect vehicular and pedestrian safety to a certain extent. Moreover, such additional facilities usually require regular maintenance or unscheduled emergency repairs. These works may result in partial or complete closure of the bridge sections, causing serious traffic congestion and inconvenience to road users (especially during peak hours) and also rendering the bridges not being able to fully perform their function of diverting traffic flow.

In view of the reasons above, the Administration has set out the criteria for handling installation proposals of additional facilities. Under normal circumstances, the Administration will approve installing such public utilities as telecommunications cables on bridge structures only when there are no feasible alternatives. The criteria have been adopted for years and the public utility companies have been informed of the relevant requirements.

Under the abovementioned mechanism, the Administration has permitted telecommunication companies to install such facilities as optical cables on some bridges, including Tsing Ma Bridge, Ap Lei Chau Bridge and Shenzhen Bay Bridge. In fact, many public utility companies have built dedicated conduits and facilities on their own (for instance, the cable tunnel extending from Wah Fu to Bowen Road of the Hongkong Electric Company Limited), saving the need to lay associated utilities along main carriageways or bridges so as to reduce interference to road traffic as well as facilitate utility management and maintenance in future by the companies.

Regarding the CBL, the project is now at the preliminary design stage. The consultancy report on the project design covers only the design of the bridge itself but not the installation proposals of other public utilities. If public utility companies, including telecommunications companies, need to install such facilities as telecommunications cables along the CBL and can prove that there are no feasible alternatives, they may submit detailed proposals together with their justifications to the Civil Engineering and Development Department and the Highways Department for consideration. If the proposals are approved, the concerned departments will make appropriate arrangements in the detailed design stage that follows.

Ends/Wednesday, May 15, 2013  
Issued at HKT 12:00

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